

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Shilin Chen
Serial No. To be determined
Filing Date: January 28, 2004
Title: **ROLLER-CONE BITS, SYSTEMS, DRILLING
METHODS, AND DESIGN METHODS WITH
OPTIMIZATION OF TOOTH ORIENTATION**

MAIL STOP PATENT APPLICATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Applicants respectfully submit this statement pursuant to 37 C.F.R. §§1.56, 1.97, and 1.98 and Manual of Patent Examining Procedure § 2001.06(c). The subject matter of the instant Application is involved in Civil Action No. 4-02CV269 in the United States District Court for the Eastern District of Texas, Sherman Division, styled *Halliburton Energy Services, Inc. v. Smith International, Inc.* (the "Litigation").

The attached PTO-1449 form includes documents relating to the Litigation and other documents. Applicant requests that such documents be considered and cited in the examination of the above-identified patent application. Furthermore, pursuant to 37 C.F.R. § 1.97(h), no representation is made that these references qualify as prior art or that these references are material to the patentability of the present application.

Attorney's Docket:
074263.0208

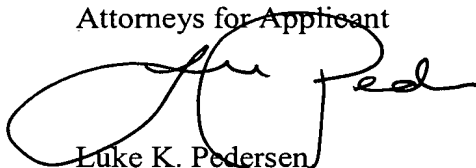
CONTINUATION
PATENT APPLICATION

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Pursuant to 37 C.F.R. § 1.98(d), all copies of references cited on the attached PTO 1449 Form are not being furnished. Furthermore, pursuant to 37 C.F.R. § 1.97(b), no fee is believed to be due. If, however, a fee is due, the Commissioner is authorized to charge such fee to Deposit Account No. 50-2148 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicant



Luke K. Pedersen
Reg. No. 45,003

Date: 1/28/04

CORRESPONDENCE ADDRESS

Customer Number: **31625**
Attorney Docket No.: 074263.0208

PTO-1449 Information Disclosure Citation In an Application	Application No. To be determined		Applicant(s) Shilin Chen	
	Docket Number 074263.0208	Group Art Unit Unassigned	Filing Date Jan. 28, 2004	

U.S. PATENT DOCUMENTS

		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	A	1,847,981	03/01/1932	C.E. Reed	--	--	07/23/1930
	B	2,117,679	05/17/1938	C.E. Reed	225	71	12/27/1935
	C	2,122,759	07/05/1938	F.L. Scott	225	71	07/16/1936
	D	2,132,498	10/11/1938	H.C. Smith	225	71	07/22/1936
	E	2,165,584	07/11/1939	H.C. Smith	225	71	07/22/1936
	F	2,230,569	02/04/1941	J.H. Howard et al.	225	71	12/20/1939
	G	2,496,421	02/07/1950	Stokes	225	71	05/07/1946
	H	2,728,559	12/27/1955	E.G. Boice et al.	255	334	12/10/1951
	I	2,851,253	09/09/1958	E.G. Boice et al.	255	347	04/27/1954
	J	4,187,922	02/12/1980	Phelps	175	374	05/12/1978
	K	4,334,586	06/01/1982	Schumacher	175	374	06/05/1980
	L	4,343,371	08/01/1982	Baker III, et al.	175	329	04/28/1980
	M	4,393,948	07/01/1983	Fernandez	175	374	04/01/1981
	N	4,408,671	10/11/1983	Munson	175	377	02/19/1982
	O	4,427,081	01/24/1984	Crawford	175	376	01/19/1982

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	P	SU 1441051 A2	11/30/1988	SU	E 21 B	10/16	X	
	Q	GB 2241266 A	08/28/1991	GB	E21B	10/46	X	
	R	EP 0511547 A2	04/14/1992	EPO	E 21 B	10/16	X	
	S	EP 0511547 A3	04/14/1992	EPO	E 21 B	10/16	X	
	T	EP 0511547 B1	04/14/1992	EPO	E 21 B	10/16	X	
	U	SU 1768745 A1	10/15/1992	SU	E 21 B	10/16	X	

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

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		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	A	4,611,673	09/16/1986	Childers et al.	175	340	11/21/1983
	B	4,657,093	04/14/1987	Schumacher	175	353	02/03/1982
	C	4,815,342	03/28/1989	Brett et al.	76	108	03/28/1989
	D	4,848,476	07/18/1989	Deane et al.	175	340	02/29/1988
	E	5,137,097	08/11/1992	Fernandez	175	228	10/30/1990
	F	5,197,555	03/30/1993	Estes	175	374	05/24/1991
	G	5,224,560	07/06/1993	Fernandez	175	374	05/18/1992
	H	5,311,958	05/17/1994	Isbell et al.	175	341	09/23/1992
	I	5,318,136	06/07/1994	Rowell et al	175	24	03/06/1991
	J	5,341,890	08/30/1994	Cowthorne et al.	175	374	01/08/1993
	K	5,370,234	12/06/1994	Sommer, Jr. et al.	209	44.1	11/08/1991
	L	5,372,210	12/13/1994	Harrell	175	431	10/12/1993
	M	5,394,952	03/07/1995	Johns et al.	175	332	08/24/1993
	N	5,415,030	05/16/1995	Jogi et al.	73	151	04/08/1994
	O	5,416,697	05/16/1995	Goodman	364	422	07/31/1992
	P	5,421,423	06/06/1995	Huffstutler	175	374	03/22/1994

		OTHER DOCUMENTS (Including Author, Title, Source, and Pertinent Pages)	DATE
	Q	MA Dekun, <i>The Operational Mechanics of the Rock Bit</i> , Petroleum Industry Press, Beijing, China, (1996)	
	R	D. Ma, D. Zhou & R. Deng, <i>The Computer Stimulation of the Interaction Between Roller Bit and Rock</i> , (1995)	
	S	Shilin Chen, <i>Linear and Nonlinear Dynamics of Drillstring</i> , (1994-1995)	
	T	D. Ma, & J.J. Azar, <i>Dynamics of Roller Cone Bits</i> , (12/1985)	
	U	D.K.Ma & S.L. Yang, <i>Kinematics of the Cone Bit</i> , (06/1985)	
	V	Dma & J.J. Azar, <i>A New Way to Characterize the Gouging-Scraping Action of Roller Cone Bits</i> , (1989)	
	W	Russian bit catalog listing items "III 190,5 T-LB-I" and "III 109,5 TKZ-LB", (prior 1997)	
	X	L.E. Hibbs, Jr., et al, <i>Diamond Compact Cutter Studies for Geothermal Bit Design</i> , (Nov. 1978)	

EXAMINER	DATE CONSIDERED
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	Docket Number 074263.0208	Group Art Unit Unassigned	Filing Date Jan. 28, 2004	

U.S. PATENT DOCUMENTS

		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	A	5,704,436	01/06/1998	Smith et al.	175	27	03/25/1996
	B	5,715,899	02/10/1998	Liang et al.	175	374	02/02/1996
	C	5,730,234	03/24/1998	Putot	175	50	04/14/1996
	D	5,794,720	08/18/1998	Smith et al.	175	40	03/25/1996
	E	5,812,068	09/22/1998	Wisler et al.	340	855.5	12/12/1995
	F	5,813,480	09/29/1998	Zaleski, Jr. et al.	175	40	12/03/1996
	G	5,813,485	09/29/1998	Portwood	175	430	06/21/1996
	H	5,839,526	11/24/1998	Cisneros, et al.	175	431	04/04/1997
	I	6,002,985	12/14/1999	Stephenson	702	13	05/06/1997
	J	6,012,015	01/04/2000	Tubel	702	6	09/15/1997
	K	6,021,377	02/01/2000	Dubinsky et al.	702	9	10/23/1996
	L	6,044,325	03/28/2000	Chakravarthy et al.	702	7	07/21/1998

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	M							

LITIGATION DOCUMENTS

			DATE
	N	Plaintiff's Original Complaint for Patent Infringement and Jury Demand, filed September 6, 2002 in the United States District Court for the Eastern District of Texas, Sherman Division, Civil Action No. 4-02CV269, <i>Halliburton Energy Services, Inc. v. Smith International, Inc.</i> , 4 pages	09/06/2002
	O	Answer and Counterclaim of Smith International, filed March 14, 2003, in the United States District Court for the Eastern District of Texas, Sherman Division, Civil Action No. 4-02CV269, <i>Halliburton Energy Services, Inc. v. Smith International, Inc.</i> , 6 pages	03/14/2003
	P	Response of Plaintiff and Counterclaim Defendant to Defendant's Counterclaim of Declaratory Judgment, filed April 3, 2003, in the United States District Court for the Eastern District of Texas, Sherman Division, Civil Action No. 4-02CV269, <i>Halliburton Energy Services, Inc. v. Smith International, Inc.</i> , 3 pages	04/03/2003
	Q	First Amended Answer and Counterclaim of Smith International, filed October 9, 2003, in the United States District Court for the Eastern District of Texas, Sherman Division, Civil Action No. 4-02CV269, <i>Halliburton Energy Services, Inc. v. Smith International, Inc.</i> , 8 pages	10/09/2003

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		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	A	6,057,784	05/02/2000	Schaaf et al.	340	854.4	09/02/1997
	B	6,095,262	08/01/2000	Chen, Shilin	175	57	08/31/1999
	C	6,109,368	09/29/2000	Goldman et al.	175	39	11/13/1998
	D	6,213,225	04/10/2001	Chen	175	57	08/31/1999
	E	6,241,034	06/01/2001	Steinke et al.	175	331	09/03/1998
	F	6,401,839	06/01/2002	Chen, Shilin	175	57	03/10/2000
	G	6,412,577	07/02/2002	Chen, Shilin	175	57	08/01/2000
	H	6,527,068	03/01/2003	Singh et al.	175	431	08/16/2000
	I						
	J						

		OTHER DOCUMENTS (Including Author, Title, Source, and Pertinent Pages)	DATE
	K	Adam T. Bourgoyne Jr et. al., " <i>Applied Drilling Engineering</i> ", Society of Petroleum Engineers Textbook Series (1991)	
	L	J. P. Nguyen, " <i>Oil and Gas Field Development Techniques: Drilling</i> " (translation 1996, from French original 1993)	
	M	" <i>Making Hole</i> ", part of Rotary Drilling Series, edited by Charles Kirkley (1983)	
	N	" <i>Drilling Mud</i> ", part of Rotary Drilling Series, edited by Charles Kirkley (1984)	
	O	H.G. Benson, " <i>Rock Bit Design, Selection and Evaluation</i> ", presented at the spring meeting of the pacific coast district, American Petroleum Institute, Division of Production, Los Angeles, May, 1956	
	P	J.C. Estes, " <i>Selecting the Proper Rotary Rock Bit</i> ", Journal of Petroleum Technology, Nov., 1971, pp1359-1367	
	Q	Sikarskie, et. al., " <i>Penetration Problems in Rock Mechanics</i> ", American Society of Mechanical Engineers, Rock Mechanics Symposium, 1973	
	R	Dykstra, et. al., " <i>Experimental Evaluations of Drill String Dynamics</i> ", SPE 28323, 1994	
	S	Kenner and Isbell, " <i>Dynamic Analysis Reveals Stability of Roller Cone Rock Bits</i> ", SPE 28314, 1994	

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